

**SENSORIMOTOR NEUROLOGY.**

- [49] **Juvenile amaurotic idiocy** (Die juvenile amaurotische Idiotie).—T. SJÖGREN. *Hereditas*, 1931, xiv, 197.

THIS communication amounts in reality to a monograph on the subject with which it deals, and is rich in clinical and genealogical detail. Many family trees are illustrated, and numerous tables bearing on various aspects of the question furnished. Apparently the affection is less rare in Sweden than elsewhere. Some good clinical photographs are reproduced.

Among the author's conclusions the following may be noticed.

1. The ophthalmological changes together with the development and establishment of the neurological syndrome exhibit a remarkable unity and constancy in their progressive course. Attention is directed to the extrapyramidal symptom-complex, the motor disorders, the gait, and the hyper-tonus. Even when it occurs in an isolated case the syndrome can scarcely be mistaken.

2. In all probability the disease pursues a recessive, monohybrid course from the standpoint of inheritance. Hereditarily and biologically considered, it differs substantially from the infantile variety.

3. There is a curious tendency for the heterozygotic predecessors to congregate in certain restricted regions of the country.

4. In the relatives of the families investigated the occurrence of dementia præcox, oligophrenia, and epilepsy is frequently noted, though whether of higher average than in the country as a whole has not been determined.

J. V.

- [50] **Post-vaccinal encephalomyelitis in Holland** (Die in Holland beobachteten Fälle von Encephalomyelitis post-vaccinalis bis zum 1. Jan., 1929).—F. S. BASTIAANSE. *Zeits. f. d. g. Neurol. u. Psychiat.*, 1931, cxxxiv, 657.

DR. BASTIAANSE supplies the reader with an exhaustive and authoritative account of the cases of encephalomyelitis following vaccination which have been observed in Holland and of which 138 are analysed in tabular form. He states that the number has by the end of 1929 exceeded 200, and that at the time of writing 87 cases had occurred in England, 20 in Austria, 21 in France, 26 in Italy, and 85 in Germany.

Of the various conclusions to which the author is led by a careful discussion of his material, clinical and pathological, the following deserve notice.

1. There are so many objections to the view that vaccine virus itself causes the encephalitis that it must be considered in the highest degree improbable.

2. The view assigning the brain disorder to the combined action of another virus and of the vaccine seems supported by many considerations. It is not proved that the former is that of epidemic encephalitis, nor is this likely, for various reasons. Nevertheless it is not proved that the virus cannot be that just mentioned.

3. Possibly a virus as yet altogether unknown and unidentified becomes pathogenic under the influence of the vaccine.

Apparently Dr. Bastiaanse considers it possible that two factors, working simultaneously, are responsible, viz. (1) a latent local infection and (2) a latent infection of the calf through a virus which when combined in a calf vaccine becomes pathogenic for man. The former 'local' infection refers to the existence of some infection latent in a family or in a district, and receives some support from the observed facts (here quoted) of the outbreak of 'influenza' or some condition described as influenza among one or two of a series of cases vaccinated on the same day, while one or two of the same series also subsequently developed the true encephalitis under discussion.

S. A. K. W.

[51] **Nonsuppurative encephalomyelitis accompanying chickenpox.**—H. M. ZIMMERMAN and H. YANNET. *Arch. of Neurol. and Psychiat.*, 1931, xxvi, 322.

THE history is presented of a white girl, aged 13 months, who on the third day following the appearance of an extensive varicella exanthem became feverish, irritable and restless. On the following day, there occurred two generalised convulsions, the second lasting thirty minutes. The child died during the third convulsion, which occurred that night. Examination of the cerebrospinal fluid obtained post mortem revealed 20 mononuclear cells per cubic millimetre. Globulin was absent, and the fluid was sterile.

The lesions found in encephalitis following vaccination are characterised by perivascular degeneration of the myelin in the white matter, accompanied by a marked glial proliferation around these vessels. Active phagocytosis of lipoids is present in these zones of destruction of myelin. In these conditions the encephalitic changes are sharply limited to the white matter: there is neither destruction of myelin, perivascular glial proliferation nor degeneration of ganglion cells in the gray matter. However, in the case of encephalitis following chickenpox, herein reported, perivascular demyelination and accumulations of fat-granule cells were present, but, in addition, there was a widespread involvement of ganglion-cells and a complete absence of glial proliferation. The changes of the ganglion-cells correspond rather closely to those described in acute, nonsuppurative encephalitis, but the formation of glial reticulum, hypertrophy of the endothelial and hyperplasia of the adventitial cells of bloodvessels described by Low in that condition were absent in the case

under discussion. Thus this case of encephalitis following chickenpox had certain features characteristic of both the encephalitis following vaccination and that following measles and the nonspecific encephalitis described by Low.

R. M. S.

- [52] **Pneumocephalia intracranialis spontanea.**—L. GUTTMANN. *Zeits. f. d. g. Neurol. u. Psychiat.*, 1930, cxxviii, 82.

THIS is a useful summary and critical analysis of the condition in which air or gas of one or other kind appears within the cranial cavity, above or below the meninges, or in the cerebral substance, as a consequence of injury or for other pathological reasons. A schematic classification of the known varieties is offered, and a personal case described, with references to the cognate literature.

J. S. P.

- [53] **Neurologic complications of pernicious anæmia.**—WILLIAM NEEDLES. *Arch. of Neurol. and Psychiat.*, 1931, xxvi, 346.

OF eleven cases of pernicious anæmia, complicated by subacute combined degeneration, in which adequate treatment with liver was given, signs of subacute combined degeneration developed in five despite therapy. Four cases remained stationary as a result of treatment, while in two cases some evidence of improvement occurred. These figures indicate that in appraising the value of the use of liver as a means of therapy neither complete pessimism nor complete optimism is justified. Why some patients do well while others fail to rally is a problem requiring further study. With regard to patients treated with liver before the onset of nervous complications, despite the favourable observations of Minot and Murphy the reports of other observers show that early and adequate liver treatment is by no means an absolute safeguard against the onset of neurological signs.

R. M. S.

### PROGNOSIS AND TREATMENT.

- [54] **The radical treatment of traumatic epilepsy and its rationale.**—WILDER PENFIELD. *Can. Med. Assoc. Jour.*, 1930, xxiii, 189.

A SERIES of four cases are described in which operation for the relief of epilepsy following head injury was undertaken, with good results. Much stress is laid on the value of encephalography. It is pointed out clearly that epileptic attacks are most likely to occur, whatever the site of the wound, if the dura is penetrated and the cerebral substance injured, however moderately. From